

CM What is claimed is:

1. A protein exhibiting procoagulant activity having the amino acid sequence:

A-X-B

N  
P  
N  
K  
wherein region A represents the polypeptide sequence Ala-20 through Arg-759 substantially as shown in Table 1; region B represents the polypeptide sequence Ser-1709 through Tyr 2351 substantially as shown in Table 1; and region X represents a polypeptide sequence comprising up to 949 amino acids substantially duplicative of sequences of amino acids within the sequence Ser-760 through Arg-1708 of Table 1, wherein the amino terminus of X is covalently bonded through a peptide bond to the the carboxy terminus of A, and the carboxy terminus of X is likewise bonded to the amino terminus of B.

2. A protein of claim 1 comprising the amino acid sequence Ala-20 through Pro-1000 followed by Asp-1582 through Tyr-2351 substantially as shown in Table 1 wherein Pro-1000 is covalently bonded by a peptide bond to Asp-1582.

3. A protein of claim 1 comprising the amino acid sequence Ala-20 through Thr-778 followed by Pro-1659 through Tyr-2351, substantially as shown in Table 1, wherein Thr-778 is covalently bonded by a peptide bond to Pro-1659.

4. A protein of claim 1 comprising the amino acid sequence Ala-20 through Thr-778 followed by Glu-1694 through Tyr-2351, substantially as shown in Table 1, wherein Thr-778 is covalently bonded by a peptide bond to Glu-1694.

5. A DNA molecule encoding the protein of claim 1.

CLAIMS

6. A DNA molecule encoding the protein of claim 2.
7. A DNA molecule encoding the protein of claim 3.
8. A DNA molecule encoding the protein of claim 4.
9. A genetically engineered host cell containing, and capable of expressing, a DNA molecule encoding the protein of claim 1.
10. A genetically engineered host cell of claim 9 wherein the host cell is a mammalian, yeast or bacterial cell.
11. A method for producing a protein exhibiting procoagulant properties which comprises culturing a genetically engineered cell of claim 9 under suitable conditions permitting expression of the protein.
12. A pharmaceutical preparation useful for therapeutic treatment of Hemophilia A comprising a sterile preparation of a protein of claim 1 in admixture with a pharmaceutically accepted carrier.
13. A pharmaceutical preparation useful for therapeutic treatment of Hemophilia A comprising a sterile preparation of a protein of claim 2 in admixture with a pharmaceutically accepted carrier.
14. A pharmaceutical preparation useful for therapeutic treatment of Hemophilia A comprising a sterile preparation of a protein of claim 3 in admixture with a pharmaceutically accepted carrier.
15. A pharmaceutical preparation useful for therapeutic treatment of Hemophilia A comprising a sterile preparation of a protein of claim 4 in admixture with a pharmaceutically accepted carrier.

16. A method of treating Hemophilia A comprising administering to a patient an effective dose of the preparation of claim 12.

17. A method of treating Hemophilia A comprising administering to a patient an effective dose of the preparation of claim 13.

18. A method of treating Hemophilia A comprising administering to a patient an effective dose of the preparation of claim 14.

19. A method of treating Hemophilia A comprising administering to a patient an effective dose of the preparation of claim 15.

*add  
a1*